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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/770,647 12/19/96 ISEBERG

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EXAMINER

LM61/0302

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ART UNIT

PAPER NUMBER

2743

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/770,647

Applicant(s)

Iseberg et al.

Examiner

Huyen Le

Group Art Unit

2743



☒ Responsive to communication(s) filed on Dec 22, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 22-34 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 22-34 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Part III DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyahra (4,447,677).

Regarding claim 25, Miyahra teaches an insert earphone which comprises a unitary housing (3, figure 1). The housing comprises a hollow body portion which has an end wall, at least one interior wall, an open end (see the open end of the tubular extension 12), and a hollow elongated tubular portion (12) extending from the end wall.

Miyahra further teaches a receiver (1) which has a sound outlet port (54, 55).

The earphone of Miyahra further comprises an insert (57, and see col. 4, lines 33-36). As shown in figure 1, the outlet port of the receiver includes all the limitations as claimed.

Regarding claim 26, Miyahra teaches a high-fidelity insert earphone (the Applicant should note that the limitation of "high-

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fidelity" is just in the preamble) which comprises a unitary housing (3, figure 1). The housing comprises a hollow body portion which has an end wall, at least one interior wall, an open end (see the open end of the tubular extension 12), and a hollow elongated tubular portion (12) extending from the end wall.

Miyahra further teaches a receiver (1) which has a sound outlet port (54, 55).

The earphone of Miyahra further comprises an insert (57, and see col. 4, lines 33-36). As shown in figure 1, the outlet port (55) of the receiver extends only partially into the hollow elongated tubular portion (12).

Regarding claim 27, it is inherent that the insert (57) inhibits movement of the receiver within the hollow body portion.

Regarding claim 28, Miyahra teaches a damper (58, 59) which is supported within the hollow elongated tubular portion (12).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

4. Claim 22 is rejected under 35 U.S.C. § 103 as being unpatentable over Miller (U.S. patent no. 3,819,860) in view of Gauthier (U.S. patent no. 4,520,236), McCabe (U.S. patent no. 3,671,685) and further in view of Killion (U.S. patent no. 4,677,679).

Miller teaches an insert earphone which comprises a unitary housing having a hollow body portion (11, 29 and see figure 2). The hollow body portion (11, 29) has an end wall, an open end (see the opening for the cable 18), and a hollow elongated tubular portion (11) extending from the end wall.

In addition, Miller shows that an end cap (not numbered, see the end cap for the cable 18) is connected to cover the open end, and a cable (16, 18, column 2 lines 56-62) includes plural conductors. Further, Miller shows a receiver (19) which has a

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sound outlet port (not numbered, see figure 2), and a damper (26) which is supported within the hollow elongated tubular portion.

Miller does not specifically teach a resilient inserting which is disposed between the receiver and the interior walls of the unitary housing.

Gauthier teaches that a resilient insert (36) is packed surround the receiver (32) of a hearing aid.

Since Miller (col. 3, line 68 through col. 4, lines 1-4), and Gauthier teaches the material surrounding the receiver for attenuating and dampening of spurious sound waves entering through the housing; it therefore would have been obvious to one skilled in the art to provide the resilient material, as taught by Gauthier, in order to substitute the body of the liquid in the Miller. This would provide a better material to prevent the mechanical vibrations of the receiver from being transmitted to the housing, and the feedback from the source.

Miller in view of Gauthier does not specifically teach a resilient sealing member disposed over the tubular portion. However, it is very well known in the art to provide a resilient sealing member disposed over the earpiece.

McCabe teaches a sealing member (8a, 8b) for an insert earphone (figure 1).

Therefore, it would have been obvious to one skilled in the art to provide a sealing member, as taught by McCabe, disposed over

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the tubular portion of the Miller, in order to provide a replaceable eartip to the earpiece.

Miller in view of Gauthier and McCabe does not teach a high fidelity response for the earphone. However, it is very well-known in the art to provide a high-fidelity earphone.

Further, Killion teaches a network (40a) in the earphone for providing a high-fidelity response (column 3, lines 42-50 and column 6, lines 44-56).

Therefore, it would have been obvious to one skilled in the art to provide a network, as taught by Killion, in the earphone of the Miller in view of Gauthier and McCabe in order to provide a high quality sound for the earphone.

5. Claims 23 and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over McCabe U.S. patent no. 3,671,685) in view of Langford (U.S. patent no. 3,408,461) and further in view of Killion (U.S. patent no. 4,677,679).

Regarding claims 23 and 24, McCabe teaches an apparatus which comprises an electrical connector (3a, 3b), a plurality of conductors (4a', 4a", 4b', 4b"), and a pair of insert earphones (2a, 2b). Each of the earphones comprises a unitary housing (2a, 2b), a receiver (5), and a resilient sealing member (8a, 8b).

McCabe lacks the teaching of a damper supported within the hollow elongated tubular portion (7a, 7b). However, it is very

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well-known in the art to provide a damper disposed at the hollow tube which is connected to the ear canal of the wearer.

Langford shows a damper (41) which is disposed at the hollow tube of a hearing aid.

Therefore, it would have been obvious to one skilled in the art to provide the damper, as taught by Langford, in the hollow elongated tubular portion of the McCabe headset, for attenuating the acoustic of the sound path.

McCabe in view of Langford does not teach a high fidelity response as claimed in claim 23 or a filter with first and second conductors as claimed in claim 24 for the earphone. However, it is very well-known in the art to provide a filter for improving the quality sound of the earphone.

Further, Killion teaches a network circuit (40a, 40a', 40b) with first and second conductors in the earphone for providing a high-fidelity response (column 3, lines 42-50 and column 6).

Therefore, it would have been obvious to one skilled in the art to provide a network circuit or the filter, as taught by Killion, in the earphone of the McCabe in view of Langford in order to provide a high quality sound for the earphone.

6. Claims 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahra et al. (U.S. patent no. 4,447,677) in view of Kelsey (U.S. patent no. 2,430,229).

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Regarding claims 29-30 and 33, Miyahra teaches an earplug (11) and lacks the teaching of a resilient material for the earplug. However, it is very well-known in the art to provide an earplug which is made of a resilient material.

Kelsey teaches an earplug (10, figures 1-2, 5 and 11) which is made of rubber (col.3, lines 2-3) for an insert earpiece.

Therefore, it would have been obvious to one skilled in the art to provide the resilient material, as taught by Kelsey, for the earplug of Miyahra for providing a better acoustic sealing and a better fitting to the ear canal of the wearer.

Regarding claims 31 and 34, since Miyahra in view of Kelsey has the structure as claimed, it is obvious that the earphone of Miyahra in view of Kelsey includes the characteristic as claimed.

Regarding claim 32, Kelsey^c shows the resilient sealing member has a plurality of outwardly projecting flange portions as claimed (figures 1 and 5).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is (703) 305-4844. The examiner can normally be reached on Monday through Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



HL
February 27, 1998


HUYEN LE
PRIMARY EXAMINER